10

15

WHAT IS CLAIMED IS:

1. A portable audio playback device, comprising:

A headset assembly having a first earpiece and a second earpiece interconnected by a headband, wherein the headset assembly is configured to be worn on the head of a user such that the earpieces are positioned over respective ears of the user;

at least one audio speaker positioned in at least one of the first earpiece and the second earpiece;

a storage device in the headset assembly for storing audio data; memory accessing circuitry in the headset assembly for accessing the audio data in the storage device;

a controller in the headset assembly for sending the audio signals based on the audio data to the at least one speaker; and

a power supply in the headset assembly for powering the audio playback device.

2. The device of claim 1, wherein the storage device is a removable storage device.

20

- 3. The device of claim 2, wherein the storage device is a solid state digital storage media having digitally recorded audio information thereon.
- 4. The device of claim 2, wherein the storage device is an opticalstorage device.

15

20

25

- 5. The device of claim 2, wherein the storage device is an electronic memory.
- 6. The device of claim 2, wherein the storage device is a magnetic memory.
 - 7. The device of claim 2, wherein the storage device is a flash memory.
 - 8. The device of claim 1, wherein said first earpiece includes a storage device slot for removably receiving the storage device therein.
 - 9. The device of claim 8, wherein the second earpiece houses the power supply.

10. The device of claim 9, wherein wiring is provided for interconnecting the power supply, speakers, controller and accessing circuitry, and at least some of said wiring extends through an interior of said headband.

11. A portable audio playback device, comprising:

A headset assembly having a first earpiece and a second earpiece interconnected by a headband, wherein the headset assembly is configured to be worn on the head of a user such that the earpieces are positioned over respective ears of the user;

at least one audio speaker positioned in at least one of the first earpiece and the second earpiece;

10

15

a storage device in the headset assembly for storing audio data; memory reader in the headset assembly for accessing the audio data in the storage device;

a controller in the headset assembly for sending the audio signals based on the audio data to the at least one speaker;

a power supply in the headset assembly for powering the audio playback device; and

and at least one audio control assembly provided on the headset assembly and including a control button for use by the user in controlling the playback of the audio data.

- 12. The device of claim 11, wherein the at least one audio control assembly is located on one of said first earpiece and said second earpiece.
- 13. The device of claim 11, further including a plurality of audio control assemblies each including an associated control button providing a different control function for use by the user, wherein the audio control assemblies are each located on one of said first earpiece and said second earpiece.

20

25

- 14. The device of claim 13, wherein the audio control assemblies provide at least power on/off, stop/start, fast forward, fast reverse, and volume control functions.
- assembly is located on said headband.

15. The device of claim 11, wherein the at least one audio control

16. The device of claim 11, further including a plurality of audio control assemblies each including an associated control button providing a different control function for use by the user, wherein the audio control assemblies are located on the headband.

5

17. The device of claim 16, wherein the audio control assemblies provide at least power on/off, stop/start, fast forward, fast reverse, and volume control functions.

10

18. The device of claim 11, wherein the storage device is a removable storage device.

15

- 19. The device of claim 18, wherein the storage device is a solid state digital storage media having digitally recorded audio information thereon.
- 20. The device of claim 18, wherein the storage device is an optical storage device.
- 21. The device of claim 18, wherein the storage device is an electronic memory.
 - 22. The device of claim 18, wherein the storage device is a magnetic memory.
- 25 23. The device of claim 18, wherein the storage device is a flash memory.

15

20

25

- 24. The device of claim 11, wherein said first earpiece includes a storage device slot for removably receiving the storage device therein.
- 25. The device of claim 24, wherein the second earpiece houses thepower supply.
 - 26. The device of claim 11, wherein wiring is provided for interconnecting the power supply, speakers, controller and memory reader, and at least some of said wiring extends through an interior of said headband.

27. A portable audio playback device, comprising:

A headset assembly having a first earpiece and a second earpiece interconnected by a headband, wherein the headset assembly is configured to be worn on the head of a user such that the earpieces are positioned over respective ears of the user;

at least one audio speaker positioned in at least one of the first earpiece and the second earpiece;

a storage device in the headset assembly for storing audio data; memory accessing circuitry in the headset assembly for reading and writing audio data in the storage device;

a microphone connected to the headset assembly for receiving user voice input;

a controller in the headset assembly for sending the audio signals based on the audio data stored on the storage device to the at least one speaker, and for controlling writing of audio data based on the voice input to the storage device; and

a power supply in the head set assembly for powering the audio playback device.

28. The device of claim 27, wherein the storage device is a removable storage device.

29. A portable audio playback system, comprising:

A headset assembly having a first earpiece and a second earpiece interconnected by a headband, wherein the headset assembly is configured to be worn on the head of a user such that the earpieces are positioned over respective ears of the user, said headset further including at least one audio speaker positioned in at least one of the first earpiece and the second earpiece, and an audio signal receiver.

a playback unit remote from said headset unit including a storage device for storing audio data, memory accessing circuitry for accessing the audio data in the storage device, and a transmitter for transmitting wireless audio signals to the headset based on the audio data;

wherein the audio signals received by the headset assembly are sent to the at least one speaker so that they are heard by the user.

20

25

15

30. The device of claim 29, wherein the headset assembly further includes a microphone and a transmitter for transmitting wireless audio signals based on user voice input provided to the microphone, and said playback unit further includes a receiver for receiving the transmitted audio signals and recorder for recording audio data in the storage device based on the received audio signals.